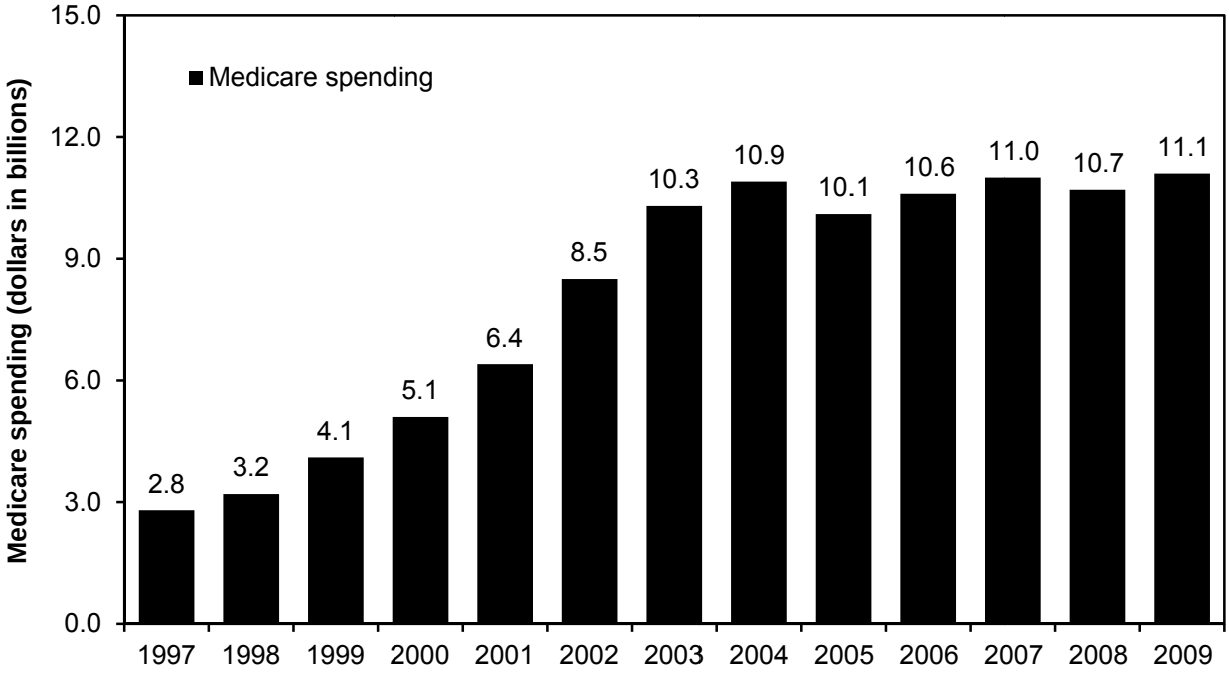
SECTION 10

Prescription drugs

Chart 10-1. Medicare spending for Part B drugs administered in physicians' offices or furnished by suppliers



Note: Data include Part B–covered drugs administered in physicians' offices or furnished by suppliers (e.g., certain oral drugs and drugs used with durable medical equipment). Data do not include Part B–covered drugs furnished in hospital outpatient departments or dialysis facilities.

Source: MedPAC analysis of Medicare claims data.

- Spending for Part B drugs administered in physicians' offices or furnished by suppliers totaled about $11.1 billion in 2009, up 3.5 percent from the 2008 level.

- Medicare spending on Part B drugs increased at an average rate of 25 percent per year from 1997 to 2003. In 2005, the Medicare payment rate changed from one based on the average wholesale price to 106 percent of the average sales price. With the move to the new payment system, spending declined 8 percent in 2005. Since then spending has increased modestly, growing at an average rate of 2.3 percent per year since 2005.

- In addition to the new payment system, another factor contributing to the modest growth in Part B spending is reduced use of darbepoetin alfa and epoetin alfa. Annual Part B spending on these products declined by nearly $1 billion between 2006 and 2009 due in part to changes in CMS coverage policy and Food and Drug Administration labeling.

- This total does not include drugs provided through outpatient departments of hospitals or to patients with end-stage renal disease in dialysis facilities. MedPAC estimates that payments for separately billed drugs provided in hospital outpatient departments equaled about $3.5 billion in 2009. We estimate that freestanding and hospital-based dialysis facilities billed Medicare an additional $3.0 billion for drugs in 2009.

Chart 10-2. Top 10 Part B drugs administered in physicians' offices or furnished by suppliers, by share of expenditures, 2009

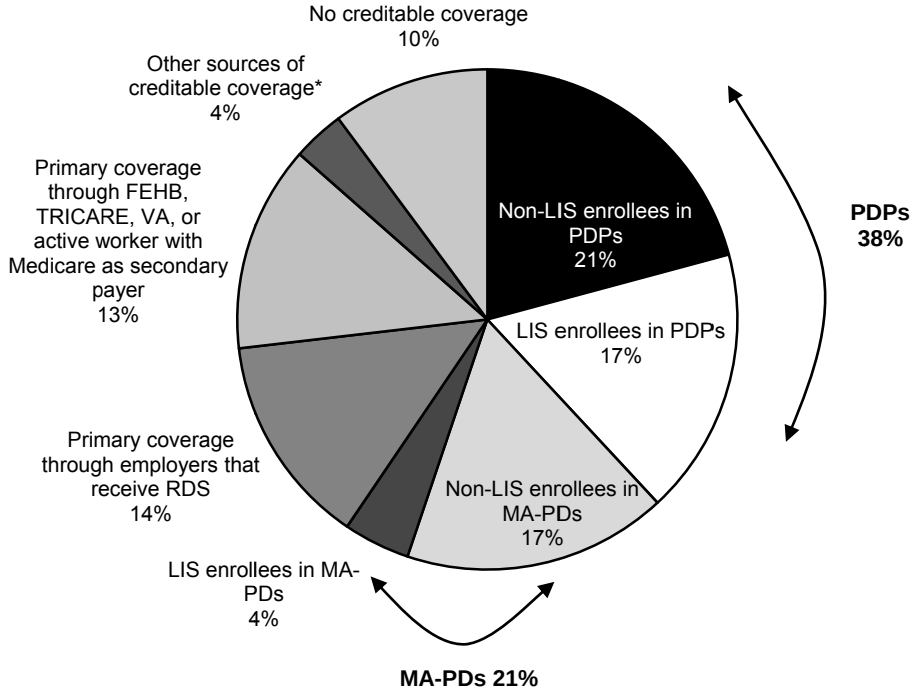
Drug name	Clinical indications	Competition	Percent of spending	Rank in 2008
Rituximab	Lymphoma, leukemia, rheumatoid arthritis	Sole source	7.8%	1
Ranibizumab	Age-related macular degeneration	Sole source	7.7	2
Bevacizumab	Cancer, age-related macular degeneration	Sole source	7.0	3
Infliximab	Rheumatoid arthritis, Crohn's disease	Sole source	5.8	4
Pegfilgrastim	Cancer	Sole source	4.7	5
Darbepoetin alfa	Anemia	Sole source	4.2	6
Epoetin alfa	Anemia	Multisource biologic	3.3	7
Oxaliplatin	Cancer	Sole source	3.0	8
Docetaxel	Cancer	Sole source*	2.6	10
Tacrolimus	Prevent organ transplant rejection	Multisource	2.6	Not on list

Note: Data do not include Part B drugs furnished in hospital outpatient departments or dialysis facilities.
*Docetaxel was sole source in 2009, but generic versions have since become available.

Source: MedPAC analysis of Medicare claims data from CMS and information on drug and biologic approval information from the Food and Drug Administration website (www.fda.gov).

- Medicare covers more than 600 outpatient drugs under Part B, but spending is very concentrated. The top 10 drugs account for about 49 percent of all Part B drug spending.
- The seven highest expenditure products are biologics.
- Treatment for cancer dominates the list (7 of the top 10 drugs treat cancer or the side effects associated with chemotherapy) because most cancer drugs must be administered by physicians, a requirement for coverage of most Part B drugs.
- These rankings reflect Part B drugs administered in physicians' offices or furnished by suppliers.

Chart 10-3. In 2010, about 90 percent of Medicare beneficiaries were enrolled in Part D plans or had other sources of creditable drug coverage



Note: LIS (low-income subsidy), PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), RDS (retiree drug subsidy), FEHB (Federal Employees Health Benefits program), VA (Department of Veterans Affairs). TRICARE is the health program for military retirees and their dependents.
*Creditable coverage means drug benefits whose value is equal to or greater than that of the basic Part D benefit.

Source: CMS Management Information Integrated Repository, February 16, 2010; Office of Personnel Management; Department of Defense; Department of Veterans Affairs; CMS Coordination of Benefits Database; CMS Creditable Coverage Database.

- As of February 2010, CMS estimated that 34 million of the 46 million Medicare beneficiaries (73 percent) were either signed up for Part D plans or had prescription drug coverage through employer-sponsored plans under Medicare's retiree drug subsidy (RDS). (If an employer agrees to provide primary drug coverage to its retirees with an average benefit value that is equal to or greater in value than that of Part D (called creditable coverage), Medicare provides the employer with a tax-free subsidy for 28 percent of each eligible individual's drug costs that fall within a specified range of spending.)
- About 10 million beneficiaries (nearly 22 percent) receive Part D's low-income subsidy (LIS). Of these individuals, 6.4 million are dually eligible to receive Medicare and all Medicaid benefits offered in their state. Another 3.5 million qualified for extra help either because they receive benefits through the Medicare Savings Program or Supplemental Security Income Program or because they applied directly to the Social Security Administration. Among all LIS beneficiaries, about 8 million (17 percent of all Medicare beneficiaries) are enrolled in stand-alone prescription drug plans (PDPs) and 2 million (4 percent) are in Medicare Advantage–Prescription Drug plans (MA–PDs).
- Other enrollees in stand-alone PDPs numbered 9.7 million, or 21 percent of all Medicare beneficiaries. Another 7.9 million enrollees (17 percent) are in MA–PDs or other private Medicare health plans. Individuals whose employers receive Medicare's RDS numbered 6.4 million, or 14 percent. Those groups of beneficiaries directly affect Medicare program spending.
- Other Medicare beneficiaries have creditable drug coverage, but that coverage does not affect Medicare program spending. For example, 6.2 million beneficiaries (13 percent) receive drug coverage through the Federal Employees Health Benefits program, TRICARE, the Department of Veterans Affairs, or current employers because the individual is still an active worker. CMS estimates that another 1.6 million individuals have other sources of creditable coverage.
- An estimated 4.7 million beneficiaries (10 percent) have no creditable drug coverage.

Chart 10-4. Parameters of the defined standard benefit increase over time

	2006	2008	2009	2010	2011
Deductible	$250.00	$275.00	$295.00	$310.00	$310.00
Initial coverage limit	2,250.00	2,510.00	2,700.00	2,830.00	2,840.00
Annual out-of-pocket threshold	3,600.00	4,050.00	4,350.00	4,550.00	4,550.00
Total covered drug spending at annual out-of-pocket threshold	5,100.00	5,726.25	6,153.75	6,440.00	6,447.50
Maximum amount of cost sharing in the coverage gap	2,850.00	3,216.25	3,453.75	3,610.00	3,607.50
Minimum cost sharing above the annual out-of-pocket threshold					
Copay for generic/preferred multisource drug	2.00	2.25	2.40	2.50	2.50
Copay for other prescription drugs	5.00	5.60	6.00	6.30	6.30

Note: Under Part D's defined standard benefit, the enrollee pays the deductible and then 25 percent of covered drug spending (75 percent paid by the plan) until total covered drug spending reaches the initial coverage limit (ICL). Before 2011, enrollees exceeding the ICL were responsible for paying 100 percent of covered drug spending up to the annual out-of-pocket threshold. Beginning in 2011, enrollees face reduced cost sharing for the coverage gap. The amount for 2011 ($6,447.50) is for an individual with no other sources of supplemental coverage filing only brand-name drugs during the coverage gap. Cost sharing paid by most sources of supplemental coverage does not count toward this threshold. The enrollee pays nominal cost sharing above the limit.

Source: CMS, Office of the Actuary.

- The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 specified a defined standard benefit structure. In 2011, it has a $310 deductible, 25 percent coinsurance on covered drugs until the enrollee reaches $2,840 in total covered drug spending, and then a coverage gap until annual out-of-pocket spending reaches the annual threshold. Before 2011, enrollees were responsible for paying the full discounted price of covered drugs filled during the coverage gap. Because of changes made by the Patient Protection and Affordable Care Act of 2010, beginning in 2011, enrollees face reduced cost sharing of 50 percent for brand-name and 97 percent for generic drugs filled in the coverage gap. Enrollees with drug spending above $4,550 would pay the greater of $2.50 to $6.30 per prescription or 5 percent coinsurance.

- The parameters of this defined standard benefit structure increase over time at the same rate as the annual increase in average total drug expenses of Medicare beneficiaries.

- Within certain limits, sponsoring organizations may offer Part D plans that have the same actuarial value as the defined standard benefit but a different benefit structure. For example, a plan may use tiered copayments rather than 25 percent coinsurance. Or a plan may have no deductible but use cost-sharing requirements that are equivalent to a rate higher than 25 percent. Both defined standard benefit plans and plans that are actuarially equivalent to the defined standard benefit are known as "basic benefits."

- Once a sponsoring organization offers one plan with basic benefits within a prescription drug plan region, it may also offer a plan with enhanced benefits—basic and supplemental coverage combined.

Chart 10-5. Characteristics of Medicare PDPs

	2010				2011			
	Plans		Enrollees as of February 2010		Plans		Enrollees as of February 2011	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Total	1,576	100%	16.6	100%	1,109	100%	17.0	100%
Type of organization								
National*	1,268	80	14.0	84	851	77	13.9	82
Other	308	20	2.7	16	258	23	3.0	18
Type of benefit								
Defined standard	172	11	1.6	9	133	12	1.3	8
Actuarially equivalent**	609	39	11.4	68	474	43	12.6	74
Enhanced	795	50	3.7	22	502	45	3.0	18
Type of deductible								
Zero	629	40	6.5	39	464	42	7.3	43
Reduced	374	24	2.1	12	197	18	2.1	13
Defined standard†	573	36	8.1	49	448	40	7.6	45
Drugs covered in the gap								
Some generics but no brand-name drugs	273	17	1.0	6	259	23	2.2	13
Some generics and some brand-name drugs	35	2	<0.1	0	106	10	0.3	2
None	1,268	80	15.7	94	744	67	14.4	85

Note: PDP (prescription drug plan). The PDPs and enrollment described here exclude employer-only plans and plans offered in U.S. territories. Excluded plans have 1.6 million enrollees in 2011 and had 1.1 million in 2010. Sums may not add to totals due to rounding.
*Reflects total numbers of plans for organizations with at least 1 PDP in each of the 34 PDP regions.
**Includes "actuarially equivalent standard" and "basic alternative" benefits.
†$310 in both 2010 and 2011.

Source: MedPAC analysis of CMS landscape, premium, and enrollment data.

- Part D drew about 30 percent fewer stand-alone prescription drug plans (PDPs) into the field for 2011 than in 2010. Plan sponsors are offering 1,109 PDPs in 2011 compared with 1,576 in 2010. The reduction in plan offerings is primarily the result of regulations and guidance issued by CMS to differentiate more clearly between basic and enhanced benefit plans.
- In 2011, 77 percent of all PDPs are offered by sponsoring organizations that have at least 1 PDP in each of the 34 PDP regions. Plans offered by those national sponsors account for 82 percent of all PDP enrollment.
- Sponsors are offering a slightly smaller proportion of PDPs with enhanced benefits (basic plus supplemental coverage) for 2011 and a slightly larger proportion of benefits with actuarially equivalent benefits—having the same average value as the defined standard benefit but with alternative benefit designs. Most enrollees (74 percent) are in actuarially equivalent plans.
- A larger proportion of PDPs include some benefits in the coverage gap for 2011 than in 2010. Nearly a third of all plans with some gap coverage offer generics and brand-name drugs, compared with about 1 in 10 in 2010.
- In 2011, 85 percent of PDP enrollees are in plans that offer no additional benefits in the coverage gap. However, because of the changes made by the Patient Protection and Affordable Care Act of 2010, beginning in 2011, beneficiaries no longer face 100 percent coinsurance in the coverage gap (see Chart 10-4). In addition, many PDP enrollees receive Part D's low-income subsidy, which effectively eliminates the coverage gap.

Chart 10-6. Characteristics of MA–PDs

	2010				2011			
	Plans		Enrollees as of February 2010		Plans		Enrollees as of February 2011	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Totals	1,834	100%	7.0	100%	1,566	100%	8.6	100%
Type of organization								
Local HMO	1,038	57	4.7	68	936	60	5.7	66
Local PPO	452	25	0.9	13	445	28	1.7	20
PFFS	304	17	0.9	13	146	9	0.5	5
Regional PPO	40	2	0.4	6	39	2	0.7	8
Type of benefit								
Defined standard	78	4	0.1	1	51	3	0.1	1
Actuarially equivalent*	105	6	0.3	5	121	8	0.6	7
Enhanced	1,651	90	6.6	94	1,394	89	7.9	92
Type of deductible								
Zero	1,657	90	6.6	94	1,358	87	7.8	91
Reduced	66	4	0.2	3	123	8	0.5	6
Defined standard**	111	6	0.2	2	85	5	0.2	3
Drugs covered in the gap								
Some generics but no brand-name drugs	532	29	2.3	33	457	29	3.0	36
Some generics and some brand-name drugs	408	22	1.7	25	350	22	1.6	19
None	894	49	2.9	42	759	48	3.9	46

Note: MA–PD (Medicare Advantage–Prescription Drug [plan]), HMO (health maintenance organization), PPO (preferred provider organization), PFFS (private fee-for-service). The MA–PDs and enrollment described here exclude employer-only plans, plans offered in U.S. territories, 1876 cost plans, special needs plans, demonstrations, and Part B-only plans. Sums may not add to totals due to rounding.
*Benefits labeled actuarially equivalent to Part D's standard benefit include what CMS calls "actuarially equivalent standard" and "basic alternative" benefits.
**$310 in both 2010 and 2011.

Source: MedPAC analysis of CMS landscape, premium, and enrollment data.

- There are 15 percent fewer Medicare Advantage–Prescription Drug plans (MA–PDs) in 2011 than in 2010. Sponsors are offering 1,566 MA–PDs compared with 1,834 the year before. The largest decrease was for private fee-for-service plans, making up 9 percent of all (unweighted) offerings in 2011 compared with 17 percent in 2010 (see Chart 9-1). Although the number of local HMOs also declined between 2010 and 2011, HMOs remain the dominant kind of MA–PD. The number of drug plans offered by both local and regional preferred provider organizations remained stable between 2010 and 2011.
- A larger share of MA–PDs than stand-alone prescription drug plans (PDPs) offer enhanced benefits (compare Chart 10-6 with Chart 10-5). In 2011, 45 percent of all PDPs had enhanced benefits compared with 89 percent of MA–PDs. In 2011, enhanced MA–PDs attracted 92 percent of total MA–PD enrollment.
- Most MA–PD plans have no deductible: 87 percent of MA–PD offerings in 2011 and 90 percent in 2010. MA–PDs with no deductible attracted about 91 percent of total MA–PD enrollment in 2011.
- MA–PDs are more likely than PDPs to provide some additional benefits in the coverage gap, although mostly for generics. In 2011, 51 percent of MA–PDs included some gap coverage—29 percent with some generics but no brand-name drug coverage and 22 percent with some generics and some brand-name drug coverage. Those plans account for 54 percent of MA–PD enrollment.

Chart 10-7. Average Part D premiums

	2010 enrollment (in millions)	Average monthly 2010 premium weighted by 2010 enrollment	2011 enrollment (in millions)	Average monthly 2011 premium weighted by 2011 enrollment	Dollar change	Percentage change in weighted average premium
PDPs						
Basic coverage	13.0	$34	13.9	$33	–$0.6	–2 %
Enhanced coverage	3.7	50	3.0	63	13.1	26
Any coverage	16.6	37	17.0	38	1.2	3
MA–PDs, including SNPs*						
Basic coverage	1.0	26	1.1	27	1.6	6
Enhanced coverage	7.0	13	7.6	12	–1.0	–8
Any coverage	8.0	14	8.7	14	–0.7	–5
All plans						
Basic coverage	14.0	33	15.0	33	–0.5	–1
Enhanced coverage	10.7	25	10.6	26	0.9	4
Any coverage	24.7	30	25.6	30	0.2	1

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), SNPs (special needs plans). The PDPs and enrollment described here exclude employer-only plans and plans offered in U.S. territories. The MA–PDs and enrollment described here exclude employer-only plans, plans offered in U.S. territories, 1876 cost plans, demonstrations, and Part B-only plans.
*Reflects the portion of Medicare Advantage plans' total monthly premium attributable to Part D benefits for plans that offer Part D coverage. MA–PD premiums reflect rebate dollars (75 percent of the difference between a plan's payment benchmark and its bid for providing Part A and Part B services) that were used to offset Part D premium costs. Lower average premiums for enhanced MA–PD plans reflect a different mix of sponsoring organizations and counties of operation than MA–PDs with basic coverage.

Source: MedPAC analysis of CMS landscape, plan report, and enrollment data.

- On average, Part D enrollees pay $30 per month in 2011, with premiums increasing by less than $1 compared with 2010.
- The average prescription drug plan (PDP) enrollee pays $38 per month, compared with $37 in 2010—a 3 percent increase.
- Medicare Advantage–Prescription Drug plans (MA–PDs) can lower the part of their monthly premium attributable to Part D using rebate dollars—75 percent of the difference between the plan's payment benchmark and its bid for providing Part A and Part B services. MA–PDs may also enhance their Part D benefit with rebate dollars. Many MA–PDs use rebate dollars in these ways, resulting in more enhanced offerings and lower average premiums compared with PDPs.
- The portion of Medicare Advantage premiums attributable to prescription drug benefits remained flat (decrease of less than $1) in 2011, with the average MA–PD enrollee paying $14 per month.

Chart 10-8. Number of PDPs qualifying as premium-free to LIS enrollees increased in 2011, even as overall number of PDPs declined

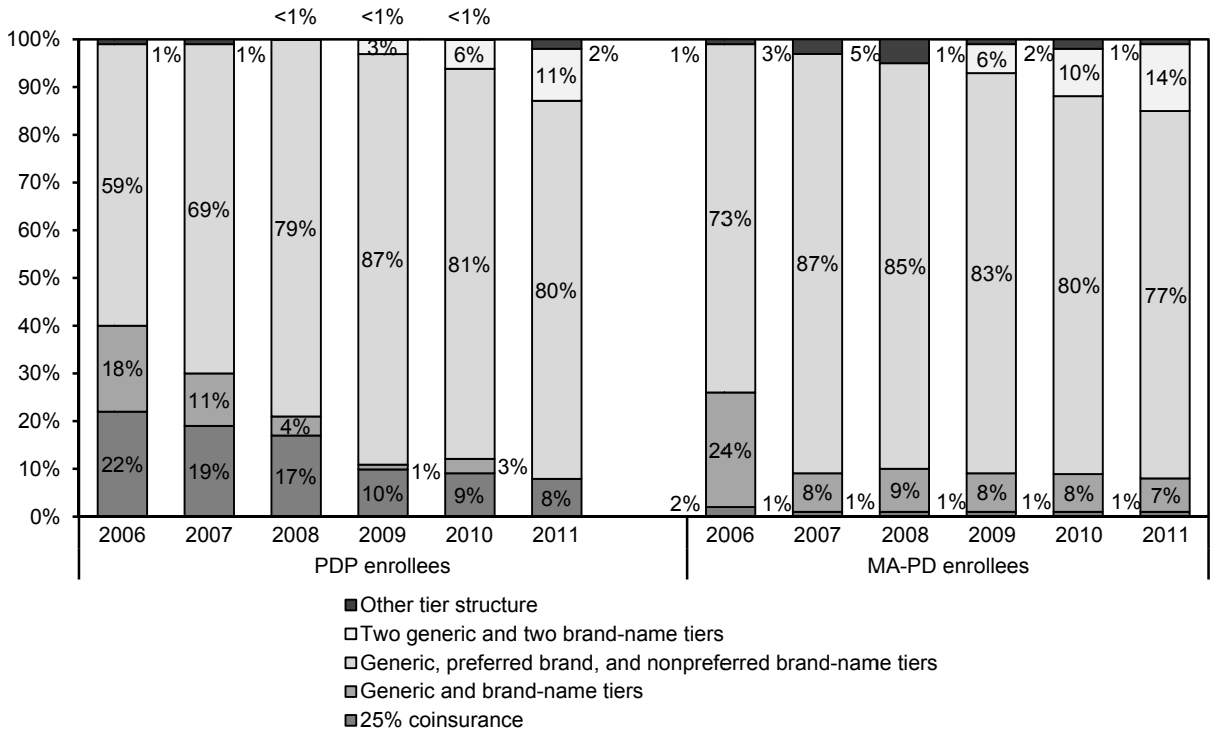
		Number of PDPs			Number of PDPs that have zero premium for LIS enrollees		
PDP region	State(s)	2010	2011	Difference	2010	2011	Difference
1	ME, NH	43	30	–13	4	7	3
2	CT, MA, RI, VT	48	34	–14	13	12	–1
3	NY	50	33	–17	11	11	0
4	NJ	47	33	–14	6	6	0
5	DC, DE, MD	45	33	–12	11	12	1
6	PA, WV	55	38	–17	11	12	1
7	VA	44	32	–12	11	10	–1
8	NC	47	33	–14	8	11	3
9	SC	47	34	–13	13	15	2
10	GA	45	32	–13	8	14	6
11	FL	49	32	–17	5	4	–1
12	AL, TN	46	34	–12	9	11	2
13	MI	46	35	–11	9	12	3
14	OH	46	34	–12	5	8	3
15	IN, KY	44	32	–12	9	14	5
16	WI	48	32	–16	10	10	0
17	IL	46	35	–11	10	10	0
18	MO	45	32	–13	13	5	–8
19	AR	49	34	–15	15	17	2
20	MS	45	32	–13	10	14	4
21	LA	45	32	–13	13	10	–3
22	TX	50	33	–17	11	12	1
23	OK	46	33	–13	10	10	0
24	KS	46	33	–13	9	12	3
25	IA, MN, MT, ND, NE, SD, WY	46	33	–13	8	10	2
26	NM	47	32	–15	8	8	0
27	CO	48	31	–17	6	7	1
28	AZ	46	30	–16	8	9	1
29	NV	46	31	–15	5	4	–1
30	OR, WA	44	32	–12	9	8	–1
31	ID, UT	48	35	–13	9	11	2
32	CA	47	33	–14	7	5	–2
33	HI	41	28	–13	7	6	–1
34	AK	41	29	–12	6	5	–1
	Total	1,576	1,109	–467	307	332	25

Note: PDP (prescription drug plan), LIS (low-income subsidy).

Source: MedPAC based on 2011 PDP landscape file and LIS enrollment data provided by CMS.

- The number of stand-alone prescription drug plans (PDPs) declined by 30 percent around the country, from 1,576 in 2010 to 1,109 in 2011. The median number of plans offered in each region is 33 compared with 46 in 2010.
- Hawaii had the fewest stand-alone PDPs with 28; the Pennsylvania–West Virginia region had the most with 38.
- In 2011, enrollees who receive Part D's low-income subsidy (LIS) have more options for PDPs in which they pay no premium. In 2011, 332 PDPs qualified to be premium-free to those enrollees, compared with 307 in 2010.
- Each region has at least four PDPs available to LIS enrollees at no premium.

Chart 10-9. In 2011, most Part D enrollees are in plans that charge higher copayments for nonpreferred brand-name drugs



Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). Calculations are weighted by enrollment. All calculations exclude employer-only groups and plans offered in U.S. territories. In addition, MA–PDs exclude demonstration programs, special needs plans, and 1876 cost plans. Sums may not add to totals due to rounding.

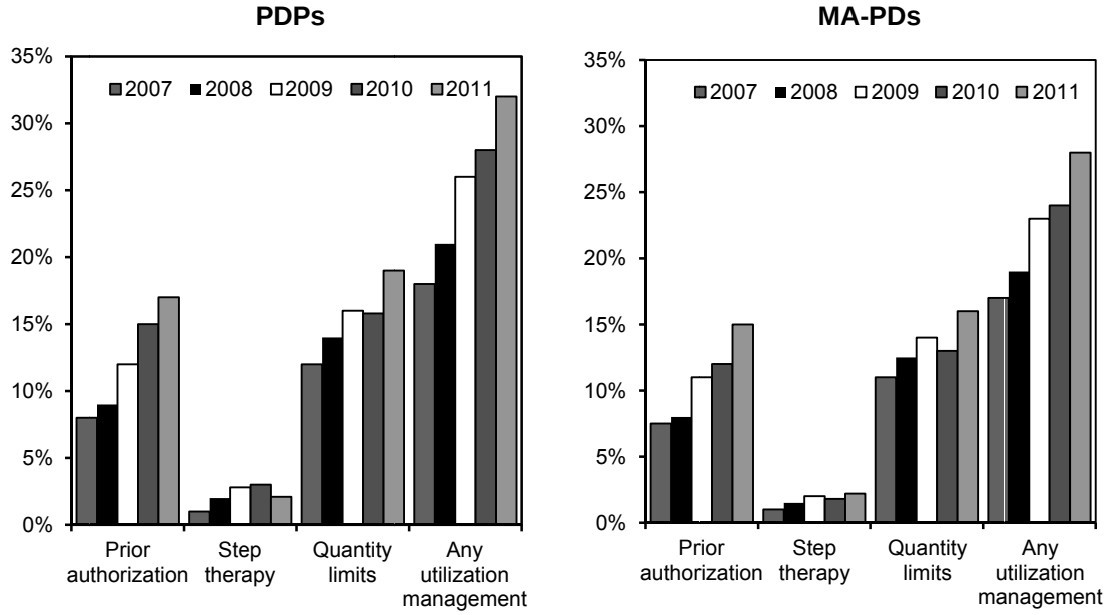
Source: MedPAC-sponsored analysis by NORC/Georgetown University/Social and Scientific Systems analysis of formularies submitted to CMS.

- In 2011, 80 percent of prescription drug plan (PDP) enrollees are in plans that distinguish between preferred and nonpreferred brand-name drugs; another 11 percent are in plans with two generic and two brand-name tiers. In 2006, only 59 percent of PDP enrollees were in plans with such distinctions. Over 90 percent of Medicare Advantage–Prescription Drug (MA–PD) plan enrollees are in such plans in 2010, up from 73 percent in 2006.

- For enrollees in PDPs that distinguish between preferred and nonpreferred brand-name drugs, the median copay in 2011 is $42 for a preferred brand and $78 for a nonpreferred brand. The median copay for generic drugs is $7. For MA–PD enrollees, in 2011, the median copay is $40 for a preferred brand, $80 for a nonpreferred brand, and $6 for a generic drug.

- Most plans, except those that use the defined standard benefit's 25 percent coinsurance for all drugs, also use a specialty tier for drugs that have a negotiated price of $600 per month or more. In 2011, median cost sharing for a specialty tier drug is 30 percent among PDPs and 33 percent among MA–PDs. Enrollees may not appeal cost sharing for drugs in specialty tiers.

Chart 10-10. In 2011, use of utilization management tools continues to increase for both PDPs and MA–PDs



Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). Calculations are weighted by enrollment. All calculations exclude employer-only groups and plans offered in U.S. territories. In addition, MA–PDs exclude demonstration programs, special needs plans, and 1876 cost plans. Values reflect the percent of listed chemical entities that are subject to utilization management, weighted by plan enrollment. Prior authorization means that the enrollee must get preapproval from the plan before coverage. Step therapy refers to a requirement that the enrollee try specified drugs first before moving to other drugs. Quantity limits mean that plans limit the number of doses of a drug available to the enrollee in a given time period.

Source: MedPAC-sponsored analysis by NORC/Georgetown University/Social and Scientific Systems analysis of formularies submitted to CMS.

- The number of drugs listed on a plan's formulary does not necessarily represent beneficiary access to medications. Plans' processes for nonformulary exceptions, prior authorization (preapproval from plan before coverage), quantity limits (plans limit the number of doses of a particular drug covered in a given time period), and step therapy requirements (enrollees must try specified drugs before moving to other drugs) can affect access to certain drugs. For example, unlisted drugs may be covered through the nonformulary exceptions process, which may be relatively easy for some plans and more burdensome for others. Alternatively, on-formulary drugs may not be covered in cases in which a plan does not approve a prior authorization request. Also, a formulary's size can be deceptively large if it includes drugs that are no longer used in common practice.

- In 2011, the average enrollee in a stand-alone prescription drug plan faces some form of utilization management for 32 percent of drugs listed on a plan's formulary, compared with 28 percent for the average Medicare Advantage–Prescription Drug plan enrollee. The most common utilization management tool is quantity limits, followed by prior authorization, and then step therapy.

Chart 10-11. Characteristics of Part D enrollees, 2009

	All Medicare	Part D	Plan type		Subsidy status	
			PDP	MA–PD	LIS	Non-LIS
Beneficiaries* (in millions)	48.8	28.7	18.7	10.0	10.9	17.8
Percent of all Medicare	100%	59%	38%	21%	22%	37%
Gender						
Male	45%	41%	40%	43%	39%	42%
Female	55	59	60	57	61	58
Race/ethnicity						
White, non-Hispanic	78	74	76	72	59	84
African American, non-Hispanic	10	11	11	10	20	6
Hispanic	8	10	8	14	14	7
Asian	3	3	3	3	5	2
Other	2	2	2	1	2	1
Age (years)						
<65	21	23	27	16	42	12
65–69	24	22	20	26	14	26
70–74	18	18	17	20	13	21
75–79	15	15	14	16	11	17
80+	22	22	23	21	20	24
Urbanicity**						
Metropolitan	79	79	74	89	77	80
Micropolitan	12	12	15	7	13	11
Rural	8	9	11	4	10	8
Average risk score†	1.049	1.101	1.123	1.060	1.201	1.041
Percent relative to all Part D		100%	102%	96%	109%	95%

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income subsidy). Totals may not sum to 100 percent due to rounding.
*Figures for Medicare and Part D include all beneficiaries with at least one month of enrollment in the respective program. A beneficiary is classified as LIS if that individual received Part D's LIS at some point during the year. For individuals who switch plan types during the year, classification into plan types is based on a greater number of months of enrollment.
**Urbanicity based on the Office of Management and Budget's core-based statistical area. A metropolitan area contains a core urban area of 50,000 or more population, and a micropolitan area contains an urban core of at least 10,000 (but less than 50,000) population. Fewer than 1 percent of Medicare beneficiaries were excluded due to an unidentifiable core-based statistical area designation.
†Part D risk scores are calculated by CMS using the prescription drug hierarchical condition category model developed before 2006. Risk scores shown here are not adjusted for LIS or institutionalized status (multipliers).

Source: MedPAC analysis of Medicare Part D denominator and enrollment files from CMS.

- In 2009, 28.7 million Medicare beneficiaries (59 percent) enrolled in Part D at some point in the year. Most of them (18.7 million) were in stand-alone prescription drug plans (PDPs), with 10 million in Medicare Advantage–Prescription Drug plans (MA–PDs). About 11 million enrollees received Part D's low-income subsidy (LIS).
- Compared with the overall Medicare population, Part D enrollees are more likely to be female and non-White. MA–PD enrollees are less likely to be disabled beneficiaries under age 65 and more likely to be Hispanic compared with PDP enrollees; LIS enrollees are more likely to be female, non-White, and disabled beneficiaries under age 65 compared with non-LIS enrollees.
- Patterns of enrollment by urbanicity for Part D enrollees were similar to the overall Medicare population with 79 percent in metropolitan areas, 12 percent in micropolitan areas, and the remaining 9 percent in rural areas.
- The average risk score for PDP enrollees is higher (1.123) than the average for all Part D enrollees (1.101), while the average risk score for MA–PD enrollees is lower (1.06).

Chart 10-12. Part D enrollment trends, 2006–2009

	2006	2007	2008	2009
Part D enrollment, in millions*				
Total	24.5	26.1	27.5	28.7
By plan type				
PDP	17.7	18.3	18.6	18.7
MA–PD	6.8	7.8	8.9	10.0
By subsidy status				
LIS	10.2	10.4	10.7	10.9
Non-LIS	14.3	15.7	16.9	17.8
By race/ethnicity				
White, non-Hispanic	17.2	19.4	20.5	21.4
African American, non-Hispanic	2.6	2.9	3.1	3.2
Hispanic	2.2	2.5	2.7	2.8
Other	2.5	1.3	1.3	1.3
By age (years)				
<65	5.6	6.1	6.4	6.6
65–69	5.0	5.4	5.9	6.3
70-79	8.3	8.7	9.0	9.3
80+	5.6	6.0	6.3	6.4
Enrollment growth, in percent				
Total		7%	5%	4%
By plan type				
PDP		4	2	<1
MA–PD		14	14	12
By subsidy status				
LIS		2	2	2
Non-LIS		10	8	6
By race/ethnicity				
White, non-Hispanic		13	5	4
African American, non-Hispanic		13	5	4
Hispanic		14	6	6
Other		–49	6	<1
By age (years)				
<65		8	6	4
65–69		8	8	7
70–79		5	4	4
80+		7	4	3

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income subsidy). *Figures include all beneficiaries with at least one month of enrollment. A beneficiary is classified as LIS if that individual received Part D's LIS at some point during the year. If a beneficiary was enrolled in both a PDP and an MA–PD plan during the year, that individual was classified into the type of plan with a greater number of months of enrollment. Numbers may not sum to totals due to rounding.

Source: MedPAC analysis of Medicare Part D denominator and enrollment files from CMS.

- Between 2006 and 2009, Medicare Advantage–Prescription Drug plan enrollment grew by more than 10 percent per year, compared with growth rates of less than 5 percent per year for prescription drug plans. During the same period, the number of enrollees receiving the low-income subsidy (LIS) remained relatively flat, while the number of non-LIS enrollees grew by 10 percent in 2007, 8 percent in 2008, and 6 percent in 2009.

Chart 10-13. Part D enrollment by region, 2009

PDP region	State(s)	Percent of Medicare enrollment		Percent of Part D enrollment			
				Plan type		Subsidy status	
		Part D	RDS	PDP	MA–PD	LIS	Non-LIS
1	ME, NH	55%	13%	88%	12%	49%	51%
2	CT, MA, RI, VT	58	18	69	31	42	58
3	NY	59	19	57	43	46	54
4	NJ	53	22	81	19	35	65
5	DE, DC, MD	45	19	85	15	41	59
6	PA, WV	63	13	53	47	33	67
7	VA	52	11	80	20	38	62
8	NC	59	16	75	25	43	57
9	SC	54	16	79	21	45	55
10	GA	60	11	79	21	44	56
11	FL	60	13	54	46	34	66
12	AL, TN	62	12	67	33	47	53
13	MI	54	25	63	37	34	66
14	OH	54	25	65	35	36	64
15	IN, KY	56	18	83	17	41	59
16	WI	54	15	66	34	33	67
17	IL	55	19	87	13	38	62
18	MO	62	12	71	29	35	65
19	AR	61	9	83	17	45	55
20	MS	65	6	90	10	54	46
21	LA	62	13	67	33	49	51
22	TX	57	15	71	29	45	55
23	OK	60	8	80	20	38	62
24	KS	61	7	85	15	29	71
25	IA, MN, MT, NE, ND, SD, WY	66	9	74	26	27	73
26	NM	62	8	63	37	39	61
27	CO	59	13	49	51	29	71
28	AZ	61	12	43	57	31	69
29	NV	56	13	47	53	28	72
30	OR, WA	57	11	60	40	31	69
31	ID, UT	57	11	59	41	28	72
32	CA	69	10	52	48	39	61
33	HI	66	4	48	52	29	71
34	AK	39	25	97	3	61	39
	Mean	59	14	65	35	38	62
	Minimum	39	4	43	3	27	39
	Maximum	69	25	97	57	61	73

Note: PDP (prescription drug plan), RDS (retiree drug subsidy), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income subsidy). Definition of regions based on PDP regions used in Part D.

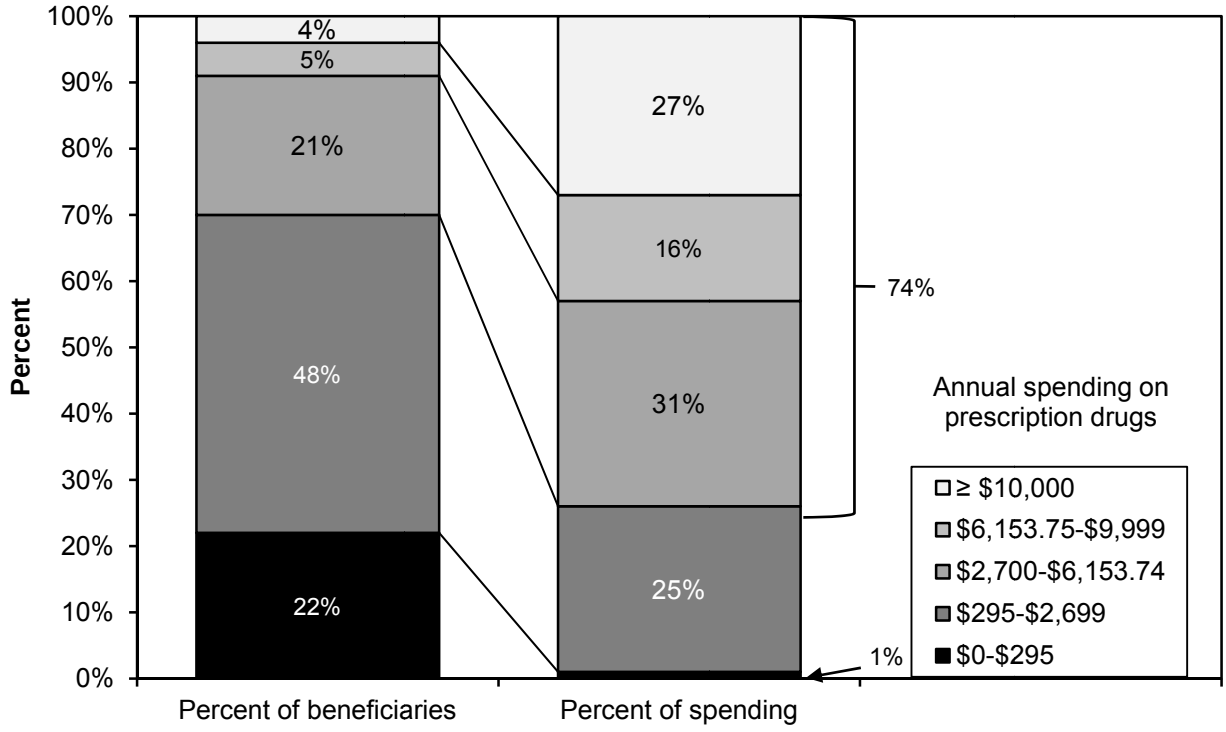
Source: MedPAC analysis of Part D enrollment data from CMS.

- Among Part D regions, in 2009, between 39 percent and 69 percent of all Medicare beneficiaries enrolled in Part D. Beneficiaries were more likely to enroll in Part D in regions where a low take-up rate for the retiree drug subsidy (RDS) was observed. For example, in Region 32 (California) and Region 33 (Hawaii), the shares of Medicare beneficiaries enrolled in Part D were 69 percent and 66 percent, respectively. In these two regions, 10 percent or fewer beneficiaries enrolled in employer-sponsored plans that received the RDS.

- A wide variation was seen in the shares of Part D enrollees who enrolled in prescription drug plans (PDPs) and Medicare Advantage–Prescription Drug (MA–PD) plans across PDP regions. The pattern of MA–PD enrollment is generally consistent with enrollment in Medicare Advantage plans.

- The share of Part D enrollees receiving the low-income subsidy (LIS) ranged from 27 percent in Region 25 (Iowa, Minnesota, Montana, North Dakota, Nebraska, South Dakota, and Wyoming) to 61 percent in Region 34 (Alaska). In 26 of the 34 PDP regions, LIS enrollees account for 30 percent to 50 percent of enrollment. In two regions (Region 20 (Mississippi) and Region 34 (Alaska)), LIS enrollees account for more than half of Part D enrollment.

Chart 10-14. The majority of Part D spending is incurred by fewer than half of all Part D enrollees, 2009



Note: Numbers may not sum to 100 percent due to rounding.

Source: MedPAC analysis of Medicare Part D prescription drug event data from CMS.

- Medicare Part D spending is concentrated among a subset of beneficiaries. In 2009, 30 percent of Part D enrollees had annual spending of $2,700 or more, at which point enrollees were responsible for 100 percent of the cost of the drug until their spending reached $6,153.75 under the defined standard benefit. These beneficiaries accounted for 74 percent of total Part D spending.

- The costliest 9 percent of beneficiaries, those with drug spending above the catastrophic threshold under the defined standard benefit, accounted for 43 percent of total Part D spending. Roughly three-quarters of beneficiaries with the highest spending receive Part D's low-income subsidy (see Chart 10-15). Spending on prescription drugs is less concentrated than Medicare Part A and Part B spending. In 2009, the costliest 5 percent of beneficiaries accounted for 38 percent of annual Medicare fee-for-service (FFS) spending and the costliest quartile accounted for 81 percent of Medicare FFS spending

Chart 10-15. Characteristics of Part D enrollees, by spending levels, 2009

	Annual drug spending		
	<$2,700	$2,700–$6,153.75	>$6,153.75
Sex			
Male	42%	38%	39%
Female	58	62	61
Race/ethnicity			
White, non-Hispanic	74	76	72
African American, non-Hispanic	11	11	13
Hispanic	10	9	10
Other	5	4	5
Age (years)			
<65	21	21	44
65–69	24	19	14
70–74	19	18	13
75–80	15	16	11
80+	22	27	19
LIS status*			
LIS	31	45	76
Non-LIS	69	55	24
Plan type**			
PDP	61	71	81
MA–PD	39	29	19

Note: LIS (low-income subsidy), PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). A small number of beneficiaries were excluded from the analysis because of missing data. Totals may not sum to 100 percent due to rounding.
*A beneficiary is assigned LIS status if that individual received Part D's LIS at some point during the year.
**If a beneficiary was enrolled in both a PDP and an MA–PD plan during the year, that individual was classified in the type of plan with a greater number of months of enrollment.

Source: MedPAC analysis of Medicare Part D prescription drug events data and Part D denominator file from CMS.

- In 2009, beneficiaries with annual drug spending of more than $2,700 were more likely to be female than beneficiaries with annual spending below $2,700 (62 percent and 61 percent compared with 58 percent).

- Beneficiaries with annual spending greater than $6,153.75 are more likely to be disabled beneficiaries under age 65 and receive the low-income subsidy (LIS) compared with those with annual spending below $2,700.

- Most beneficiaries with spending greater than $6,153.75 are enrolled in stand-alone prescription drug plans (PDPs) (81 percent) compared with Medicare Advantage–Prescription Drug plans (MA–PDs) (19 percent). Beneficiaries with annual spending below $2,700, on the other hand, are more likely to be in MA–PDs compared with those with higher annual spending (39 percent compared with 19 percent). This finding reflects the fact that most LIS enrollees are more costly on average and are in PDPs.

Chart 10-16. Part D spending and utilization per enrollee, 2009

	Part D	Plan type		LIS status	
		PDP	MA–PD	LIS	Non-LIS
Total gross spending (billions)	$73.8	$54.6	$19.2	$40.5	$33.2
Total number of prescriptions* (millions)	1,338	915	423	598	740
Average spending per prescription	$55	$60	$45	$68	$45
Per enrollee per month					
Total spending	$228	$260	$169	$339	$163
Out-of-pocket spending**	39	41	36	8	58
Plan liability†	136	150	111	192	104
Low-income cost sharing subsidy	52	68	21	140	N/A
Number of prescriptions*	4.1	4.4	3.7	5.0	3.6

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income subsidy), N/A (not applicable). Part D prescription drug event (PDE) records are classified into plan types based on the contract identification on each record. For purposes of classifying the PDE records by LIS status, monthly LIS eligibility information in Part D's denominator file was used. Estimates are sensitive to the method used to classify PDE records to each plan type and LIS status. Numbers may not sum to totals due to rounding.
*Number of prescriptions standardized to a 30-day supply.
**Out-of-pocket (OOP) spending includes all payments that count toward the annual OOP spending threshold.
†Plan liability includes plan payments for both covered and noncovered drugs.

Source: MedPAC analysis of Medicare Part D PDE data and denominator file from CMS.

- In 2009, gross spending on drugs for the Part D program totaled $73.8 billion, with roughly three-quarters ($54.6 billion) accounted for by Medicare beneficiaries enrolled in prescription drug plans (PDPs). Part D enrollees receiving the low-income subsidy (LIS) accounted for about 55 percent ($40.5 million) of the total.

- The number of prescriptions filled by Part D enrollees totaled 1.34 billion, with nearly 70 percent (915 million) accounted for by PDP enrollees. The 38 percent of enrollees who received the LIS accounted for about 45 percent (598 million) of the total number of prescriptions filled.

- Medicare beneficiaries enrolled in Part D plans fill 4.1 prescriptions at $228 per month on average. PDP enrollees have higher average monthly spending and more prescriptions filled compared with Medicare Advantage–Prescription Drug (MA–PD) plan enrollees.

- The average monthly plan liability for MA–PD enrollees ($111) is considerably lower than that of PDP enrollees ($150), while average monthly out-of-pocket (OOP) spending is similar for enrollees in both types of plans ($36 vs. $41). The average monthly low-income cost sharing subsidy is much lower for MA–PD enrollees ($21) compared with PDP enrollees ($68).

- Average monthly spending per enrollee for an LIS enrollee ($339) is more than double that of a non-LIS enrollee ($163), while the average number of prescriptions filled per month by an LIS enrollee is 5.0 compared with 3.6 for a non-LIS enrollee. LIS enrollees have much lower OOP spending, on average, than non-LIS enrollees ($8 vs. $58). Part D's LIS pays for most of the cost sharing for LIS enrollees, averaging $140 per month.

Chart 10-17. Part D risk scores vary across regions, by plan type and by LIS status, 2009

PDP region	State(s)	Percent enrolled in PDPs vs. MA–PDs	Percent of Part D enrollees receiving LIS	Average risk score (RxHCC)				
				Part D	PDP	MA–PD	LIS	Non-LIS
				Average absolute risk score				
All regions				1.101	1.123	1.060	1.201	1.041
				Average normalized risk score (mean = 1.0)				
1	ME, NH	88%	49%	0.983	0.973	0.949	0.963	0.970
2	CT, MA, RI, VT	69	42	1.010	1.010	1.004	1.013	0.998
3	NY	57	46	1.033	1.056	1.011	1.019	1.022
4	NJ	81	35	1.042	1.042	0.987	1.036	1.052
5	DE, DC, MD	85	41	1.035	1.021	1.034	1.034	1.026
6	PA, WV	53	33	1.011	1.020	1.016	1.011	1.022
7	VA	80	38	1.004	0.996	0.992	1.005	1.004
8	NC	75	43	1.015	1.013	0.997	1.019	0.998
9	SC	79	45	1.026	1.009	1.057	1.008	1.023
10	GA	79	44	1.031	1.020	1.031	1.018	1.025
11	FL	54	34	1.054	1.065	1.056	1.060	1.059
12	AL, TN	67	47	1.043	1.031	1.065	1.028	1.030
13	MI	63	34	1.001	1.030	0.953	1.026	0.994
14	OH	65	36	1.030	1.041	1.008	1.056	1.017
15	IN, KY	83	41	1.020	1.014	0.989	1.018	1.012
16	WI	66	33	0.958	0.966	0.939	0.992	0.950
17	IL	87	38	0.989	0.980	0.955	0.987	0.991
18	MO	71	35	1.002	1.008	0.973	1.027	0.993
19	AR	83	45	0.996	0.983	1.003	0.972	0.998
20	MS	90	54	1.006	0.990	1.012	0.968	1.004
21	LA	67	49	1.019	1.022	1.008	0.992	1.015
22	TX	71	45	1.031	1.027	1.030	1.022	1.018
23	OK	80	38	0.993	0.986	0.980	0.988	0.996
24	KS	85	29	0.962	0.952	0.945	0.980	0.973
25	IA, MN, MT, NE, ND, SD, WY	74	27	0.913	0.908	0.908	0.950	0.918
26	NM	63	39	0.929	0.921	0.946	0.907	0.942
27	CO	49	29	0.919	0.914	0.941	0.945	0.924
28	AZ	43	31	0.961	0.929	1.009	0.959	0.977
29	NV	47	28	0.951	0.956	0.965	0.958	0.967
30	OR, WA	60	31	0.919	0.910	0.939	0.921	0.930
31	ID, UT	59	28	0.913	0.912	0.924	0.929	0.926
32	CA	52	39	0.955	0.967	0.956	0.943	0.960
33	HI	48	29	0.935	0.926	0.962	0.905	0.967
34	AK	97	61	0.929	0.911	0.931	0.896	0.902
	Mean	65	38	1.000	1.000	1.000	1.000	1.000
	Minimum	43	27	0.913	0.908	0.908	0.896	0.902
	Maximum	97	61	1.054	1.065	1.065	1.060	1.059

Note: LIS (low-income subsidy), PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), RxHCC (prescription drug hierarchical condition category). Part D risk scores are calculated by CMS using the RxHCC model developed before 2006. Risk scores shown here are not adjusted for LIS or institutionalized status (multipliers) and are normalized so that the average across Part D enrollees in each group equals 1.0. If a beneficiary was enrolled in both a PDP and an MA–PD plan during the year, that individual was classified in the type of plan with a greater number of months of enrollment.

Source: MedPAC analysis of Medicare enrollment files from CMS.

(Chart continued next page)

Chart 10-17. Part D risk scores vary across regions, by plan type and by LIS status, 2009 (continued)

- Under Part D, payments to stand-alone prescription drug plans (PDPs) and Medicare Advantage–Prescription Drug plans (MA–PDs) are adjusted to account for differences in enrollees' expected costs using the prescription drug hierarchical condition category (RxHCC) model developed before 2006. The RxHCC model uses age, gender, disability status, and medical diagnosis to predict Part D benefit spending. As is true for any risk-adjustment model, the RxHCC model does not explain all variation in future payments. The model may also produce higher scores in areas with high service use because there are more opportunities to make diagnoses in those areas and the RxHCC model uses diagnoses among other factors in its score.

- In 2009, the normalized average risk scores for Part D enrollees varied from 0.913 (Region 25 and Region 31) to 1.054 (Region 11), meaning that average expected costs per enrollee ranged from about 8.7 percent below the national average to about 5.4 percent above the national average across regions.

- The overall average risk score for PDP enrollees (1.123) is higher than that of MA–PD enrollees (1.06) and is consistently so across all regions, except in Arizona (Region 28), where most (57 percent) Part D enrollees are enrolled in MA–PDs. In contrast, normalized risk scores for both PDP and MA–PD enrollees are similar in most regions, with the difference exceeding 0.05 (5 percentage points) in only three regions: New Jersey (Region 4), Michigan (Region 13), and Arizona (Region 28).

- The overall average risk score for enrollees receiving the low-income subsidy (LIS) (1.201) is higher than that of non-LIS enrollees (1.041) and is consistently so across all regions. In contrast, normalized risk scores for both LIS and non-LIS enrollees are similar in most regions, with the difference exceeding 0.05 (5 percentage points) only in Hawaii (Region 33), where a relatively small share of enrollees receive the LIS (29 percent).

Chart 10-18. Part D spending varies across regions even after controlling for prices and health status, 2009

PDP region	State(s)	Percent enrolled in PDPs	Percent of Part D enrollees receiving LIS	Relative average Part D spending per capita*	
				Unadjusted	Adjusted**
1	ME, NH	88%	49%	1.02	0.97
2	CT, MA, RI, VT	69	42	1.04	1.01
3	NY	57	46	1.22	1.15
4	NJ	81	35	1.24	1.18
5	DE, DC, MD	85	41	1.11	0.99
6	PA, WV	53	33	1.04	1.08
7	VA	80	38	1.00	0.98
8	NC	75	43	1.11	1.05
9	SC	79	45	1.10	0.99
10	GA	79	44	1.06	0.96
11	FL	54	34	0.98	0.91
12	AL, TN	67	47	1.07	0.97
13	MI	63	34	1.02	0.96
14	OH	65	36	1.01	1.00
15	IN, KY	83	41	1.07	1.02
16	WI	66	33	0.95	1.04
17	IL	87	38	0.97	0.96
18	MO	71	35	1.01	1.01
19	AR	83	45	0.94	0.90
20	MS	90	54	1.03	0.93
21	LA	67	49	1.08	1.02
22	TX	71	45	1.01	0.92
23	OK	80	38	1.03	1.02
24	KS	85	29	0.94	1.02
25	IA, MN, MT, NE, ND, SD, WY	74	27	0.83	1.00
26	NM	63	39	0.78	0.86
27	CO	49	29	0.84	1.00
28	AZ	43	31	0.78	0.89
29	NV	47	28	0.80	0.92
30	OR, WA	60	31	0.88	1.01
31	ID, UT	59	28	0.89	1.05
32	CA	52	39	0.93	0.98
33	HI	48	29	0.93	1.12
34	AK	97	61	1.33	1.23
	Mean	65	38	1.00	1.00
	Minimum	43	27	0.78	0.86
	Maximum	97	61	1.33	1.23
National average spending				$2,629	N/A

Note: PDP (prescription drug plan), LIS (low-income subsidy), N/A (not available).
*Spending includes payments for ingredient costs and dispensing fees. Figures (per capita spending and index values) are for beneficiaries residing in a community setting only. Per capita based on full-year equivalent enrollment.
**Adjusted spending controls for regional differences in prices, demographic characteristics (such as age, gender, disability, and LIS status), and beneficiaries' health status as measured by medical diagnoses used for prescription drug hierarchical condition categories.

Source: Acumen, LLC, analysis for MedPAC.

- Average per capita drug spending for drugs under Part D varies widely across prescription drug plan (PDP) regions. The national average per capita spending was $2,629 in 2009. Relative to the national average, the unadjusted regional average per capita spending ranges from 78 percent (0.78) in New Mexico (Region 26) and Arizona (Region 28) to 133 percent (1.33) in Alaska (Region 34).

- Adjusting per capita drug spending for regional differences in prices and beneficiaries' health status reduces the variation across PDP regions: After the adjustment, the difference between minimum and maximum decreases from 0.55 (1.33 minus 0.78) to 0.37 (1.23 minus 0.86). Relative to the national average, the adjusted average per capita spending ranges from 86 percent (0.86) in New Mexico (Region 26) to 123 percent (1.23) in Alaska (Region 34).

Chart 10-19. Top 15 therapeutic classes of drugs under Part D, by spending and volume, 2009

Top 15 therapeutic classes by spending	Dollars		Top 15 therapeutic classes by volume	Prescriptions	
	Billions	Percent		Millions	Percent
Antihyperlipidemics	$6.5	8.7%	Antihypertensive therapy agents	138.7	10.4%
Antipsychotics	5.9	8.0	Antihyperlipidemics	126.1	9.4
Diabetic therapy	5.5	7.5	Beta adrenergic blockers	84.6	6.3
Antihypertensive therapy agents	4.9	6.6	Diabetic therapy	83.3	6.2
Peptic ulcer therapy	4.6	6.3	Diuretics	75.8	5.7
Asthma/COPD therapy agents	4.3	5.8	Antidepressants	71.9	5.4
Antidepressants	3.0	4.1	Peptic ulcer therapy	64.3	4.8
Platelet aggregation inhibitors	3.0	4.0	Analgesics (narcotic)	63.5	4.7
Analgesics (narcotic)	2.9	3.9	Calcium channel blockers	56.3	4.2
Cognitive disorder therapy (antidementia)	2.7	3.7	Thyroid therapy	46.5	3.5
Anticonvulsant	2.6	3.5	Antibacterial agents	37.8	2.8
Antivirals	2.4	3.3	Asthma/COPD therapy agents	36.9	2.8
			Anticonvulsants	35.3	2.6
Calcium & bone metabolism regulators	1.8	2.5	Calcium & bone metabolism regulators	27.9	2.1
Analgesics (anti-inflammatory/ antipyretic, non-narcotic)	1.7	2.3	Analgesics (anti-inflammatory/ antipyretic, non-narcotic)	25.6	1.9
Antibacterial agents	1.5	2.0			
Subtotal, top 15 classes	53.3	72.3	Subtotal, top 15 classes	974.5	72.8
Total, all classes	73.8	100.0	Total, all classes	1,337.9	100.0

Note: COPD (chronic obstructive pulmonary disease). Volume is the number of prescriptions standardized to a 30-day supply. Therapeutic classification based on the First DataBank Enhanced Therapeutic Classification System 1.0.

Source: MedPAC analysis of Medicare Part D prescription drug event data from CMS.

- In 2009, gross spending on prescription drugs covered by Part D plans totaled $73.8 billion. The top 15 therapeutic classes by spending accounted for about 72 percent of the total.
- More than 1.3 billion prescriptions were dispensed in 2009, with the top 15 therapeutic classes by volume accounting for about 73 percent of the total.
- Eleven therapeutic classes are among the top 15 based on both spending and volume. Central nervous system agents (antipsychotics, anticonvulsants, and antidepressants) dominate the list by spending, accounting for over one-fifth of the spending, while cardiovascular agents (antihyperlipidemics, antihypertensive therapy agents, beta adrenergic blockers, calcium channel blockers, and diuretics) dominate the list by volume, accounting for nearly 50 percent of the prescriptions in the top 15 therapeutic classes.

Chart 10-20. Generic dispensing rate for the top 15 therapeutic classes, by plan type, 2009

By order of aggregate spending	PDP share of all prescriptions	Generic dispensing rate		
		All	PDPs	MA–PDs
Antihyperlipidemics	64%	61%	56%	69%
Antipsychotics	84	38	37	39
Diabetic therapy	66	60	58	66
Antihypertensive therapy agents	64	72	70	76
Peptic ulcer therapy	69	71	67	79
Asthma/COPD therapy agents	72	9	10	7
Antidepressants	72	77	75	81
Platelet aggregation inhibitors	69	8	7	9
Analgesics (narcotic)	73	93	93	94
Cognitive disorder therapy (antidementia)	75	4	3	4
Anticonvulsant	76	80	79	83
Antivirals	77	25	22	35
Calcium & bone metabolism regulators	66	58	56	64
Analgesics (anti-inflammatory/ antipyretic, non-narcotic)	67	81	79	85
Antibacterial agents	70	88	87	89
All therapeutic classes	68	70	69	74

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), COPD (chronic obstructive pulmonary disease). Shares are calculated as a percent of all prescriptions standardized to a 30-day supply. Therapeutic classification is based on the First DataBank Enhanced Therapeutic Classification System 1.0. Generic dispensing rate is defined as the proportion of generic prescriptions dispensed within a therapeutic class. Part D prescription drug event records are classified as PDP or MA–PD records based on the contract identification on each record.

Source: MedPAC analysis of Medicare Part D prescription drug event data from CMS.

- In 2009, Part D enrollees in stand-alone prescription drug plans (PDPs) accounted for 68 percent of prescriptions dispensed under Part D. PDP enrollees accounted for a disproportionately high share of prescriptions for classes such as antipsychotics, anticonvulsants, and antivirals. Most of the prescriptions in these classes were taken by low-income subsidy (LIS) beneficiaries, of whom more than 80 percent are enrolled in PDPs.

- Overall, analgesics (narcotic) have the highest generic dispensing rate (GDR) (93 percent), followed by antibacterial agents (88 percent) and non-narcotic analgesics (81 percent) compared with 70 percent across all therapeutic classes.

- The GDR for PDP enrollees averages 69 percent across all therapeutic classes, compared with 74 percent for Medicare Advantage–Prescription Drug (MA–PD) plan enrollees. Across the 15 therapeutic classes, GDRs for PDP enrollees were generally lower than for MA–PD enrollees with the exception of agents for asthma/chronic obstructive pulmonary disease therapy.

- There were large differences in GDRs for PDPs and MA–PDs. The largest differences were for antihyperlipidemics and antivirals, with a 13 percentage point difference. Some of the difference in the GDRs reflects the fact that most beneficiaries receiving the LIS are in PDPs. On average, LIS enrollees are less likely to take a generic medication in a given therapeutic class (see Chart 10-21).

Chart 10-21. Generic dispensing rate for the top 15 therapeutic classes, by LIS status, 2009

By order of aggregate spending	LIS share of prescriptions	Generic dispensing rate		
		All	LIS	Non-LIS
Antihyperlipidemics	35%	61%	56%	63%
Antipsychotics	83	38	37	40
Diabetic therapy	48	60	53	67
Antihypertensive therapy agents	36	72	70	73
Peptic ulcer therapy	51	71	66	76
Asthma/COPD therapy agents	58	9	11	6
Antidepressants	53	77	74	80
Platelet aggregation inhibitors	43	8	7	9
Analgesics (narcotic)	59	93	92	95
Cognitive disorder therapy (antidementia)	51	4	3	5
Anticonvulsant	64	80	78	83
Antivirals	67	25	16	43
Calcium & bone metabolism regulators	34	58	53	61
Analgesics (anti-inflammatory/ antipyretic, non-narcotic)	49	81	82	81
Antibacterial agents	45	88	86	89
All therapeutic classes	45	70	68	72

Note: LIS (low-income subsidy), COPD (chronic obstructive pulmonary disease). Shares are calculated as a percent of all prescriptions standardized to a 30-day supply. Therapeutic classification is based on the First DataBank Enhanced Therapeutic Classification system 1.0. Generic dispensing rate is defined as the proportion of generic prescriptions dispensed within a therapeutic class. Part D prescription drug event (PDE) records are classified as LIS or non-LIS records based on monthly LIS eligibility information in Part D's denominator file. Estimates are sensitive to the method used to classify PDE records as LIS or non-LIS.

Source: MedPAC analysis of Medicare Part D prescription drug event data and Part D denominator file from CMS.

- In 2009, Part D enrollees receiving the low-income subsidy (LIS) accounted for 45 percent of prescriptions dispensed under Part D. In 10 of 15 therapeutic classes ranked by spending, the share of prescriptions dispensed to LIS beneficiaries was greater than 45 percent, and in 3 classes the share was greater than 60 percent.

- The generic dispensing rate (GDR) for non-LIS beneficiaries averages 72 percent across all therapeutic classes, compared with 68 percent for LIS beneficiaries. Across the top 15 therapeutic classes, GDRs for non-LIS beneficiaries are higher than those for LIS beneficiaries in all but one class (asthma/chronic obstructive pulmonary disease therapy agents).

- There are large differences in GDRs across classes between LIS and non-LIS beneficiaries. The largest difference is for antivirals (27 percentage points). Some of the difference in the GDRs for this therapeutic class likely reflects differences in the mix of drugs taken between the two groups.

Chart 10-22. Pharmacies participating in Part D, 2009

	Pharmacies	Prescriptions	Gross spending
Totals	65,283	1,337.9 million	$73.8 billion
Pharmacy class			
Chain pharmacy	61.7%	61.2%	58.6%
Independent pharmacy	32.6	33.8	37.0
Franchise pharmacy	1.2	1.1	1.1
Government pharmacy	1.0	0.4	0.4
Alternate dispensing site*	3.4	3.2	2.6
Other**	N/A	0.3	0.3
Pharmacy type			
Retail†	91.4%	78.8%	77.4%
Long-term care	2.7	9.2	10.6
Mail order	0.2	7.3	6.2
Physician's office	1.0	<0.1	<0.1
Institution	1.1	0.4	0.5
MCO pharmacy	0.2	0.6	0.4
Clinic	1.4	0.9	0.9
Specialty pharmacy	0.2	2.1	2.9
Other††	1.8	0.7	1.0

Note: MCO (managed care organization), N/A (not available). Some pharmacies could not be classified because of missing and other data issues. Prescription size is standardized to a 30-day supply. Pharmacy class and type are based on 2009 National Council for Prescription Drug Programs classification.
*Alternate dispensing site includes physician offices, emergency departments, urgent care centers, and rural health facilities.
**Number of prescriptions and spending for other class include institutions and pharmacies that could not be classified because of missing and other data issues.
†Retail includes all community pharmacies, grocery pharmacies, and department store pharmacies.
††Other type includes the Indian Health Service, Department of Veterans Affairs hospitals, nuclear pharmacies, military/U.S. Coast Guard pharmacies, compounding pharmacies, and facilities specializing in intravenous infusion. Number of prescriptions and spending for other type include pharmacies that could not be classified because of missing and other data issues.

Source: MedPAC analysis of Medicare Part D prescription drug event data from CMS.

- In 2009, more than 65,000 pharmacies dispensed prescription drugs to Medicare beneficiaries enrolled in Part D. Most pharmacies (61.7 percent) are chain pharmacies, followed by independent pharmacies (32.6 percent).

- Chain pharmacies account for about 60 percent of prescriptions and spending, while independent pharmacies account for about 34 percent of prescriptions and 37 percent of spending.

- Retail pharmacies account for more than 90 percent of the pharmacies and about 80 percent of prescriptions and spending. Long-term care pharmacies account for 2.7 percent of pharmacies, but about 9 percent of prescriptions and nearly 11 percent of spending. Mail-order pharmacies account for less than 1 percent of pharmacies but account for slightly over 7 percent of prescriptions and about 6 percent of spending.

- In 2009, specialty pharmacies account for over 2 percent of prescriptions and nearly 3 percent of spending, compared with fewer than 1 percent of prescriptions and spending in previous years.

Chart 10-23. Prescriptions dispensed, by pharmacy characteristics and urbanicity, 2009

	CBSA designation		
	Metropolitan	Micropolitan	Rural
Number of pharmacies	52,978	7,172	5,120
As percent of total	81.2%	11.0%	7.8%
Prescriptions dispensed			
By pharmacy location	81.1%	11.1%	7.5%
By beneficiary location	78.1	12.6	9.2
Pharmacy class and pharmacy location			
Chain pharmacy	63.6%	57.4%	43.2%
Independent pharmacy	31.4	38.9	53.6
Franchise pharmacy	0.9	2.3	1.8
Government pharmacy	0.3	0.6	0.7
Alternate dispensing site*	3.7	0.8	0.7
Pharmacy type and pharmacy location			
Retail**	75.6%	92.1%	95.9%
Long-term care	10.3	6.2	2.5
Mail order	9.0	<0.1	<0.1
Specialty pharmacy	2.6	0	0
Other†	2.6	1.7	1.6
Pharmacy type and beneficiary location			
Retail**	77.8%	80.6%	85.0%
Long-term care	9.4	9.4	7.1
Mail order	7.7	6.3	5.4
Specialty pharmacy	2.2	1.9	1.5
Other†	2.9	1.8	1.9

Note: CBSA (core-based statistical area). A metropolitan area contains a core urban area of 50,000 or more population, and a micropolitan area contains an urban core of at least 10,000 (but fewer than 50,000) population. Fewer than 1 percent of prescription drug event records could not be classified because the CBSA designation could not be identified. Pharmacy class and type are based on the 2009 National Council for Prescription Drug Programs classification. Number of prescriptions is standardized to a 30-day supply. Totals may not sum to 100 percent due to rounding.
*Alternate dispensing site includes physicians' offices, emergency departments, urgent care centers, and rural health facilities.
**Retail includes all community pharmacies, grocery pharmacies, and department store pharmacies.
†Other type includes physicians' offices, institutions, managed care organization pharmacies, clinics, the Indian Health Service, Department of Veterans Affairs hospitals, nuclear pharmacies, military/U.S. Coast Guard pharmacies, compounding pharmacies, and facilities specializing in intravenous infusion.

Source: MedPAC analysis of Medicare Part D prescription drug event data from CMS.

(Chart continued next page)

Chart 10-23. Prescriptions dispensed, by pharmacy characteristics and urbanicity, 2009 (continued)

- In 2009, of the pharmacies that participated in Part D, 81 percent (52,978) were in metropolitan areas, about 11 percent (7,172) were in micropolitan areas, and the remaining 7.8 percent (5,120) were in rural areas. This distribution is similar to that of Part D enrollees (see Chart 10-11). Distributions of prescriptions dispensed followed similar patterns regardless of whether they were classified by pharmacy locations or beneficiary locations.

- In metropolitan areas, chain pharmacies account for about 64 percent of all prescriptions dispensed under Part D, while independent pharmacies account for slightly more than 30 percent of the prescriptions dispensed. In micropolitan areas, independent pharmacies account for a larger share of prescriptions dispensed (38.9 percent), but chain pharmacies still account for a majority of the prescriptions dispensed (57.4 percent). In rural areas, most prescriptions dispensed (53.6 percent) are accounted for by independent pharmacies.

- Retail pharmacies account for the largest share of prescriptions dispensed under Part D in all areas, but there are some differences. For example, in metropolitan areas, retail pharmacies account for 75.6 percent of prescriptions and roughly the same share of beneficiaries (77.8 percent) obtain their prescriptions at retail pharmacies. On the other hand, in micropolitan and rural areas more than 90 percent of prescriptions are accounted for by retail pharmacies, but beneficiaries residing in those areas obtain fewer than 90 percent (80.6 percent and 85 percent) of their medications at retail pharmacies.

- Long-term care pharmacies located in metropolitan areas account for a larger share of prescriptions (10.3 percent) compared with micropolitan areas (6.2 percent) and rural areas (2.5 percent). The prescriptions filled by beneficiaries residing in different areas do not vary as much; 9.4 percent are filled by beneficiaries in metropolitan areas compared with 9.4 percent and 7.1 percent filled by those in micropolitan and rural areas, respectively.

- Most mail-order pharmacies are located in metropolitan areas, and beneficiaries residing in metropolitan areas fill more prescriptions through mail-order pharmacies (7.7 percent) compared with those in micropolitan and rural areas (6.3 percent and 5.4 percent).

Web links. Drugs

- Chapters in several of MedPAC's Reports to the Congress provide information on the Medicare Part D program, as does MedPAC's March 2010 Part D Data Book and Payment Basics series.

  http://medpac.gov/chapters/Mar11_Ch13.pdf
  http://www.medpac.gov/chapters/Mar10_Ch05.pdf
  http://www.medpac.gov/documents/Mar10_PartDDataBook.pdf
  http://www.medpac.gov/chapters/Mar09_Ch04.pdf
  http://www.medpac.gov/chapters/Mar08_Ch04.pdf
  http://www.medpac.gov/chapters/Mar08_Ch05.pdf
  http://www.medpac.gov/chapters/Jun07_Ch07.pdf
  http://www.medpac.gov/chapters/Mar07_Ch04.pdf
  http://www.medpac.gov/publications/congressional_reports/Jun06_Ch07.pdf
  http://www.medpac.gov/publications/congressional_reports/Jun06_Ch08.pdf
  http://www.medpac.gov/publications/congressional_reports/June05_ch1.pdf
  http://www.medpac.gov/publications/congressional_reports/June04_ch1.pdf
  http://www.medpac.gov/documents/MedPAC_Payment_Basics_09_PartD.pdf

- Analysis of Medicare payment systems and follow-on biologics can be found in MedPAC's June 2009 Report to the Congress.

  http://www.medpac.gov/chapters/Jun09_Ch05.pdf

- Analysis of Medicare spending on Part B drugs can be found in MedPAC's January 2007 and January 2006 Reports to the Congress.

  http://www.medpac.gov/documents/Jan07_PartB_mandated_report.pdf
  http://www.medpac.gov/publications/congressional_reports/Jan06_Oncology_mandated_report.pdf

- A series of Kaiser Family Foundation fact sheet data spotlights provide information on the Medicare Part D benefit.

  http://www.kff.org/medicare/rxdrugbenefits/partddataspotlights.cfm

- CMS information on Part D.

  http://www.cms.gov/PrescriptionDrugCovGenIn/
  http://www.cms.hhs.gov/MCRAdvPartDEnrolData/
  http://www.cms.gov/PrescriptionDrugCovGenIn/06_PerformanceData.asp#TopOfPage
  http://www.cms.gov/PrescriptionDrugCovGenIn/09_ProgramReports.asp